THE NORTH RIVER BRIDGE.

ENGINEER HILDENBRAND'S PLEA FOR THE SUSPENSION PLAN.

He Says a Suspension Bridge With a Clear Span Would Be as Cheap as the 2,000-foot Cantilever with a River Pier—Could Be Built as Quickly and Would Be Safer.

Engineer W. Hildenbrand, who prepared plans for a clear span suspension bridge across the North River, does not think there is much in the objections made by the New York and New Jersey Bridge Company to the two Government reports in which a clear span suspension bridge is favored, instead of a 2,000-foot cantilever with one pier in the river. The Commission appointed by the President said that such a bridge would cost $4,000,000 more than the cantilever. Mr. Hildenbrand, in a subsequent report to the Chamber of Commerce, cut the estimate down to $24,000,000, or $2,000,000 less than the cantilever, and showed that the cost might be kept down to $21,000,000. Lastly the Board of Engineers appointed by Secretary Lamont put its cost at $23,000,000, the span to be 3,200 feet. In reply the bridge company's representatives said that a single span suspension bridge would cost three times as much as a 2,000-foot cantilever; that its erection would occupy five years longer; that it could barely sustain its own weight, and that fast heavy trains upon it would be out of the question; that it was impossible financially, and that it was a question of having a 2,000-foot cantilever or no bridge at all.

"If Secretary Lamont," Engineer Hildebrand said in reply to these arguments, "should decide against a pier, and if the bridge company should refuse to build a bridge without a pier, it is by no means proved that the public would forever be deprived of a bridge. Undoubtedly another company would speedily be formed to take up the matter, and other capitalists will have faith in the new company if the present prospective capitalists should withdraw their patronage from any design differing from that of the engineer of the bridge company. If there is money in a $26,000,000 cantilever bridge there is certainly money in a $23,000,000 suspension bridge.

"To make the matter fully understood I beg to remark that this is not a discussion on the comparative merits of a cantilever and a suspension bridge. It is merely a question whether the proposed North River bridge shall be built with or without a pier in the river. If the Bridge Committee would contemplate a bridge without a river pier, the type of construction would be exclusively their own business, and nobody would attempt to interfere. It is, however, universally conceded by engineers that the suspension type would be the only practical plan for a single span bridge. The practicability of a 2,000-foot cantilever has never been doubted by anybody, but the Chamber of Commerce, with the object to preserve the New York harbor from obstruction, has attempted to prove that a single span suspension bridge is also safe and practical, and can be built at reasonable cost.

"An argument against a suspension bridge put forth by the company is that towers and anchorages must be finished before cable-making can begin, while in a cantilever bridge the erection of the truss can be commenced upon merely finishing the tower, saving therewith the interest for a certain time of the capital required for building the anchorages. This argument is correct, but what does it amount to when we examine the matter? Referring to the report of the Board of Engineers, they place the cost of the anchorages for the suspension bridge at $6,000,000, the cost of the west tower foundation at $4,000,000, and the cost of the river pier foundation for the cantilever at $9,000,000. In other words, in addition to what is common to both structures, the suspension plan requires the expenditure of $10,000,000 and the cantilever plan the expenditure of $9,000,000 before the superstructure can be commenced. Assuming that the excess of one million in the suspension bridge substructure would be necessary during the whole time of cable making, or for eighteen months, the total loss of interest would amount to only $90,000; but a greater loss of interest will fall on the cantilever plan. It will certainly take more time to make a 250-foot deep foundation than to make one of 150 feet. Placing this difference of time very moderately at six months, the cantilever plan will lose the interest of $9,000,000 for half a year or $270,000. Subtracting therefrom the suspension plan's loss of $90,000, there remains a net loss of $180,000 to the cantilever and none to the suspension bridge.

"The argument of triple the cost for a suspension bridge over a cantilever is made by the bridge company without any proof by figures. The calculations of the two boards of engineers show conclusively that the suspension bridge of 3,200 feet span will cost less than a cantilever bridge of 2,000 feet span, with a pier requiring a foundation 250 feet deep.

"In regard to the time of erection, I would not venture to give the actual time for either structure, but the following figures will give a correct idea: The substructure of the cantilever will take at least six months more than that of the suspension bridge. The time for the construction of the suspension cables was assumed to be eighteen months, which gives an ample margin over the probable time, judging from the precedent of the Brooklyn bridge, according to which it should not require over eight or nine months. After the cables are finished, it is absolutely certain that the erection of the towers and floor system will require much less time than the erection of the cantilever superstructure. The cantilever must be built out from the towers piece by piece, while the finished cables form a bridge which enables the erection of the superstructure from as many different places as may be desired. It is, therefore, possible, though it is not probable, that such ideal arrangements would be made, as would make it possible to erect the suspension superstructure in less than one-tenth the time necessary for erecting the cantilever superstructure. Considering the whole eighteen months of cable making as an excess of time, and the erection of the other parts of the superstructure to be equal in both structures, there would be only one year more for the suspension bridge; but considering that the erection of the floor system of the suspension will go on much quicker than that of the cantilever, there is no reason to suppose that to build a suspension bridge will take more time than to build a cantilever, and the probability is that it will require even less time.

"The Brooklyn company has also assailed the safety of a suspension bridge. Scientifically speaking, both types of bridge, if properly calculated and constructed, are equally safe. The question of more or less safety comes up only under abnormal conditions, and in this respect a suspension bridge is the safest of all constructions, as is stated also in the report of the Government engineers. A suspension bridge is in a stable equilibrium; it may be subjected to any degree of distortion or side oscillations and will come back to its original position, while a little or lesser degree of distortion would prove fatal to any other type of bridge. The *Engineering News* has in each number a record of bridge accidents amounting to two or three every week. Highway and railroad bridges of different constructions are reported to have fallen down for a variety of reasons, but, though there are many suspension bridges in this country, such accidents never refer to suspension bridges. The only accidents that happened to suspension bridges are the destruction of the Wheeling bridge in 1854, that of the Clifton Niagara bridge in 1889 or thereabouts, of a small footbridge at Brunswick, Me., in 1892, and of the Milford, Pa., bridge in 1888. The last was carried away by an ice gorge. The first three were destroyed by violent tornadoes, but in each case only the floor was torn away, while the towers, anchorages, and cables, so to say, the backbone and most expensive part of the bridge, remained intact. This is different from the well-known Tay bridge disaster in Scotland, where nothing was left to indicate that there ever was a bridge at that place.

"In regard to wearing qualities I will mention two instances. The Monongahela and Allegheny bridges in Pittsburgh, built by John A. Roebling, after forty-four and forty years of service, were found, not unsafe, but merely inadequate for the increased traffic and were replaced by truss bridges. The cables were perfect and the quality of the wire in the Monongahela bridge, after having been subjected to one-half its breaking strain every day for many years, was found stronger and more ductile than when originally put in place. Another example is the Niagara bridge. This is the only regular railway suspension bridge in existence, and has been in service since 1852. Is there any other prominent railway bridge in this country showing the same age? The Niagara bridge was constructed at a time when railroading was in its infancy. It was, therefore, calculated to sustain with ample safety an ordinary train load weighing 200 tons and fifty tons on the carriage way. Trains have become heavier; but assuming 150 tons on the carriage way, a train of 718 tons may at the same time cross the bridge, making a total of 867 tons, without straining the cables above one-third of their breaking strength at the most unfavorable temperature. It is said that the owners of the Niagara bridge contemplate tearing it down and replacing it with a cantilever. This may be true or not, but it is no argument against the practicability of a railway suspension bridge. Here is such a bridge having done all required service for forty-two years, and doing it still. It has, however, only a single track, and is, therefore, not adequate to accommodate the modern traffic. This may be the reason of the owners for contemplating the construction of a bridge of greater capacity. The original cost of this bridge was $400,000, while the new cantilever bridge near it, across the same river, has cost $900,000. Will this cantilever bridge do service for forty-two years, or will it be replaced by a stronger structure before that time? If the strength of the Niagara suspension bridge should be considered insufficient for the present loads, it would be nothing against the system, but merely would show that the Niagara bridge had to share the fate of hundreds and hundreds of bridges of all kinds, which were built for light loads and became inadequate for heavy loads. The Erie road has replaced two bridges over the Passaic River, between here and Paterson, in the past two years, and I remember that these bridges were put up only eighteen years ago.

"To conclude these arguments, I beg to say that I am prepared to prove all of my statements before any committee of experts by accurate figures, and, in fact, they have already been endorsed by the reports of the two Boards of investigating engineers, while the statements of the bridge company detrimental to the suspension plans stand alone and unproved. Let the engineer of that bridge company come forward with calculations and let him prove the assertions of the company by figures. Without them the public will wisely pay no attention to such statements."

NOW FOR THE KATAHDIN.

The Next Candidate for a Trial Run Over the Long Island Course.

WASHINGTON, Dec. 8.—The ordering of the ram Katahdin to the dry dock in Boston is preliminary to her being made ready for her speed test in Long Island Sound.

A peculiar interest attaches to this vessel, as being the first of its type ever constructed expressly and exclusively for ramming. A British authority has spoken of her as the pioneer of a class in which American enterprise takes the lead. Her construction may be ascribed to several causes, prominent among them being the coast defence necessities pressing upon our system of naval construction and the persistent advocacy of rams by Admiral Ammen, to whose studies and efforts the construction of the Katahdin is so largely due. Indeed at one time there was talk of calling her the Ammen, but the name of the noble mountain of the Pine Tree State, where she has been built, was selected instead.

She was authorized nearly half a dozen years ago, under the act of March 2, 1889; but delay ensued in preparing the plans for such a novelty, and not until Oct. 18, 1890, were bids upon her called for. They were opened Dec. 20 following, and on Jan. 28, 1891, a contract was signed for her construction with the Bath Iron Works, the builders of the gunboats Machias and Castine. They had been the only bidders, and the price was $930,000 for hull and machinery.

The original design called for a vessel 243 feet long, and of about 2,050 tons displacement; but the contractors proposed to add about eight feet to her length, and this was approved by the Navy Department, as the additional space could be utilized by giving her many tons more of coal capacity at normal draught, thus increasing her steaming radius, and also giving greater berthing space for the crew. At the same time, instead of the proposed ram with a removable head, a solid steel casting for the stem was authorized, which, it was believed, would give greater strength in ramming, as well as better manœuvring qualities. The height of the conning tower was also increased.

The Katahdin, as she is now, may be described as a twin screw, armor-plated, steel, harbor defence ram, built upon Rear-Admiral Ammen's designs. She is 250 feet 9 inches long, with 43 feet 5 inches extreme breadth and 15 feet main draught, having a displacement of 2,155 tons. Her engines, of the vertical, triple expansion type, are designed for 4,800 maximum indicated horse power and a speed of 17 knots. For each quarter knot in excess of that rate, in a trial of two consecutive hours, with an air pressure in the fire room not exceeding 2½ inches of water, and with the vessel weighted to a mean draught of 15 feet, the contractors will receive $15,000. But, instead of a similar deduction of $15,000 per quarter knot for falling below an average of 17 knots, she is to be rejected altogether.

Here, then, are two unusual stipulations, one of them being a trial of two hours instead of four, and the other rejection for not reaching her contract speed. A third is that even the premiums fixed upon are to be subject to the approval of Congress. This fact is due to the failure of the act of March 2, 1889, to provide for premiums. Practically, there is no doubt that Congress will grant any bonus that may be earned, the omission to provide for one being presumably accidental, and it is also probable that Congress would authorize the acceptance of the vessel on the payment of penalties for shortcomings in speed, although no fear is expressed that she will fail to reach her contract requirements.

Turning to other features of the vessel, the normal coal supply of the Katahdin is 175 tons with 192.70 as her bunker capacity. With her bunkers full and ready for sea, her maximum draught aft is sixteen feet. To make her ready for fighting, she is partly submerged by the use of fourteen 8-inch Kingston valves, one in each transverse compartment, with sluice valves in the vertical keel and also in the longitudinals of her compartments.

The longitudinal and bracket system is used in the hull, with an inner bottom extending from the collision bulkhead to the stern. The longitudinals and girders supporting the deck are continuous, converging to the stem casting and to the stern, the frames and beams being intercostal. A description of her original plan, by Constructor Wilson, stated that "the vertical keel, two longitudinals, and armor shelf on each side of the vertical keel, are to be water-tight, forming, transversely, 6 compartments, these being divided longitudinally by water tight frames. By this means the space between the inner and outer skin is subdivided into 72 compartments. The transverse and longitudinal bulkheads between inner skin and deck armor divide this space into 30 compartments, making a total of 102 compartments in the vessel."

Above her turtle-back deck only her conning tower, which is 18 inches thick, her smoke pipe and her ventilators, with the hatch coamings and skid beams for the boats, will show. As a defence against torpedo craft she will carry four small 6-pounder rifles, but her offensive weapon is her ram. Her curved deck will help to deflect shot, and is of good resisting qualities. The outside strake of the deck armor is 6 inches thick, and the next inboard tapers from 5½ to 2½, which last is the thickness for the remainder, including the lower course of plating. The side armor is two strakes in depth, the upper one 6 inches thick, and the lower 3 inches. The hatches have armored plates, and the smoke pipe and ventilators 6 inches of armor, that of the conning tower being 18 inches.

The Katahdin's engines are in separate compartments, and each is wholly independent of the other. The cylinder diameters are 25, 36, and 56 inches, with a common stroke of 36 inches. The boilers are intended for a working pressure of 160 pounds to the square inch, and besides two double-ended Scotch boilers, 22½ feet long and 13½ feet in diameter, there is a single-ended boiler of the same diameter and 11½ feet long. The forced draught is on the closed fire-room system. The propellers are three-bladed, of manganese bronze.

Attention has been given to the comfort and convenience of officers and men, which is an important point in such a craft. Blowers in the engine and fire rooms exhaust the foul air, and fresh air is supplied from the main ventilator through air ducts led along the under side of the deck. Any apartment can be pumped out by the steam pumps, and the electric lighting will be arranged in duplicates, so as to provide for accidents.

When the Katahdin was launched in the presence of nearly 10,000 people there were about a foot of snow on the ground and a brisk wind, and the mercury was below zero. Her trial trip is likely to come also in wintry weather, although it will hardly rival the Maine temperature of February, when she took to the water.

Not a Matter of Choice.

From the Chicago Daily Tribune.

"No, I don't want it cut and I don't want it trimmed," snarled the shaggy-haired young man, seating himself in the chair and glaring savagely at the barber, "and I'm not a football player, nor a pianist, and I haven't taken any vow not to have it cut. Perhaps that will save you the trouble of asking questions. All I want is a shave."

"Yes, sir."

The barber worked in silence for ten minutes.

"I have a brother," he remarked at last, "that's got a head shaped just like yours. He has to wear his hair the same way."

MGR. SETON'S HEIRLOOMS.

RELICS THAT GIVE THE HISTORY OF A NOBLE SCOTCH FAMILY.

An Original Miniature of Mary Stuart, for Which $10,000 Was Refused—Relics of Courtier and Warrior—The Seal Used on Major Andre's Will—American Curios.

In a small tin lock box in Mgr. Robert Seton's home in Pavonia avenue, Jersey City, is a collection of relics which all the wealth of New York could not buy. They are the Seton family relics, and, dating from 1334, they represent history in two of the great nations of the world. They belong to William Seton, the eldest of the family, who is now in Europe, and are now in charge of his brother Robert. Besides these relics there are many other curiosities, pictures, and books and bric-à-brac belonging to Mgr. Seton, and of particular personal and historical interest to the Seton family.

MALBONE'S MINIATURE OF WILLIAM SETON.

The Setons appear in Burke's Peerage as having emigrated to America before the Revolution. They sprung from the Earls of Winton of Parbroath, Fifeshire, Scotland, who lost their titles when the fifth Earl of Winton lost his head because of an unfortunately offensive partisanship in the second Stuart rebellion. But the Setons kept their estates in Parbroath, and lived there in high honor for many generations. Finally William Seton came to New York, where he became wealthy, and his descendants have since lived here, allying themselves by marriage to most of the prominent old families of this country. The present head of the family in Scotland is Sir Bruce Maxwell Seton, Bart., a senior clerk of the War Office, who recently sent to Mgr. Seton his picture, which now hangs in the priest's room.

Of this race was Mary Seton, companion to the unfortunate Scotch Queen, and the first relic that Mgr. Seton took from the lock box to show THE SUN reporter who called to see the collection was an exquisite miniature of the Queen of Scots. This was an original, the only one in this country, and it was recently exhibited at Tiffany's, where a copy of it was made for William Seton Gordon of England. The miniature is exquisite in coloring and style. It came down to the American branch of the family through their ancestor, David Seton of Parbroath, Comptroller of the Scotch revenue, 1589-1595. Of him the records say:

> He was the representative of the Parbroath branch of the forfeited Earls of Winton, of which line the last Earl was beheaded for his participation in the second Stuart rebellion.

THE SETON SEAL.

Of the miniature recently exhibited at Tiffany's it is related that Prince Labanoff, Russian Ambassador in Paris, a noted collector of historic relics, and particularly of those pertaining to Scotch history, greatly desired to possess it, and offered to William Seton of Cragdon, Westchester, N. Y., $10,000 for it. Although Mr. Seton was at that time in financial embarrassment, owing to the failure of a company in which he was a heavy stockholder, he would not sell the picture.

"No price would pay for that miniature, Prince," said he to the Russian. "I will, however, give to you the next best thing to it."

He had made a fac-simile of the most beautiful workmanship, which he presented to Prince Labanoff. The miniature Mgr. Seton regards as the most valuable relic in his collection. Another miniature, and one far more beautiful, is that of the priest's grandfather, William Seton, done by Malbone in 1796. It is the face of a man about 25 years old, and is said to be one of the finest miniatures ever painted. For a description of the face the reader may turn to that part of "The House of the Seven Gables" where Hawthorne describes the miniature of Clifford Pyncheon. This was written after a visit of Hawthorne's to the Seton house, where Malbone's work was shown to him. He admired the picture so greatly that he determined then to fashion Clifford Pyncheon after it.

"Now here is the oldest heirloom I have," said Mgr. Seton, handing to the reporter a small dagger. "That was worn at the hip of Sir Alexander Seton, and in 1334 it was new and studded with silver. The silver studs have dropped out long ago, but on the end you will see the thumb-push in the form of the crescent symbol of the Setons. If any warrior in those days had picked it up on the field of battle he would have known at once from that thumb-push that the weapon belonged to a Seton. Those unpleasant-looking stains on the blade, which is of native iron, are alleged to be blood. You see the blade isn't very long, about five inches I should think, but it is fairly sharp yet."

THE MINIATURE OF MARY QUEEN OF SCOTS.

Replacing the dagger in its scabbard, which was of Cordovan make, the priest took from the box a good-sized shell beautifully mounted in silver and so hinged as to form a snuffbox. Engraved on the inside of the silver cover was the Seton coat of arms.

"This is a present," said the priest, "and there is a little story connected with it. It was a gift from the Earl of Winton to Sir George Seton about 1600, but previous to this it was a gift from the son of the Earl's head gardener to the Earl. This gardener's son was a wild blade, and when quite young he ran off to sea to become a buccaneer. There seemed to be little future in the buccaneer business, for years after he returned with no more fortune than a few curios, one of which was this shell, of a species then considered very rare. Now the Earl was quite a conchologist, so the retired pirate presented him with this shell. The Earl so admired it that he sent it to Heriot, cunningest of the silversmiths of those days, to be mounted, and Heriot mounted it as you see it. Then it was given to Sir George Seton, and came down the line to us. Tiffany told me that no finer work than Heriot did on this box can be done anywhere in the world to-day. Heriot appears in Scott's 'Fortunes of Nigel,' you remember.

"Possibly the habit of taking snuff was handed down from generation to generation of Setons," he continued, "for I have here two other snuff mulls. One was presented by Capt. George Robertson, R. N., to my great-grandfather, William Seton. This one, as you see, is also a silver-mounted shell, but the workmanship by no means compares with that of Silversmith Heriot. The other snuffbox is of wood cut from an old tree at Parbroath. Beyond that it has no historical interest.

"It would appear from this," proceeded the priest, picking up a small oblong slab of mother-of-pearl exquisitely engraved, "that my ancestors not only took snuff, but that they gambled as well. This fan card counter of the date 1667, and I infer that the Setons of that date gambled, because you can find on it the Seton coat of arms, and in those days people of rank didn't play cards for fun. This might have been used at Whitehall, for Charles II. was a great gambler, and from the variety of ornamentation on this counter I am led to suspect that some fair ancestress may have handled it. Play wasn't restricted to our sex by any means, and recent events in England seem to indicate that it isn't now. This is history that I show you now, and tragic history, too."

Taking up a small leather case, the speaker opened it and showed inside a silver seal, in the centre of which was a coat of arms. A circular legend about the edge read: "New York in America. Willm. Seton, Not. Pub."

"That seal," said Mgr. Seton, "is the finest American historical relic in the possession of the family. It signed the last will and testament of Major André, and it was the official seal of the last notary public for the Crown in this country. The date is 1779, and my ancestor, whose name is on the seal, was one of the founders of the Chamber of Commerce. Of that side of the family I don't speak much, however, because it is a blow to my pride as an American to think that old William Seton was a stanch Loyalist. My American descent I claim rather from the side of my mother, who was Miss Prime of the family of Primes, who were so prominent in the building of the nation. That Sevres cup and saucer that hangs in the cabinet there were given to my mother, then Miss Prime, by Charles X. of France.

"I have here a curio about which I should like to get some information. It is this small silver medal, engraved, as you see, 'William M. Seton, Columbian Anacreontic Society.' He was a great musician and owned the finest Stradivarius violin ever brought to this country. It has since been lost. But I cannot find any records of the Columbian Anacreontic Society, which must have produced music of a most classic type to be up to its name. I should like to get some information about it. These things that I have shown you comprise the most interesting curios that I have. Of course, I have many books and pictures, but they are not so personal to our history."

THE SETON DAGGER.

Mgr. Seton pointed to the walls where many old engravings of most curious design were hung. One represented a vicious battle in which a figure bearing a shield with the Seton coat of arms was prominent. There were miniatures of Setons dead and gone, pictures of the Seton possessions in this country and the old, and many other things of interest. One of these was the rare St. Memin collection of 760 medallion portraits, mostly of distinguished Americans, wherein appear the picture and a brief mention of Americans socially or politically prominent in this country in Revolutionary times. The Setons are well represented.

CITY CONTRASTS.

The Busiest Quarters in the Daytime Are the Loneliest at Night.

It is by very force of contrast that the quietest places in New York at night are those which are noisest by day—to wit, the great shipping and warehouse quarters. From the foot of Forty-second street on the east, clear around the island to the New York Central Railroad slips at the foot of Sixtieth street on the west, there is during the day the rush of traffic, the clatter of buggies, the rumble of trucks, the classic apostrophes of the truckmen, the building up and demolition of pyramids of merchandise on the wharves, and the quick-moving streams of men loading and unloading craft from here, there, and everywhere.

But at night all this great belt of activity is quiet and deserted, save in an occasional spot where there is an extra rush on some piece of work. The streets are filled with empty trucks and carts. There is the errant glimmer of lanterns and the faint sound of horses feeding in unsuspected stables; the shadowy figures of watchman move slowly about, the ship lanterns rise and fall with the tide, and square patches of light mark the ships' companionways and the scuttle holes of the canal boats. Across the street the restaurants and saloons are open and sometimes noisy, but along the waterside it is as quiet as the river itself.

The contrast is even greater in the great business blocks along Greenwich street on the one side and those abutting on Water street on the East River, those wonderful sections of the city where the products of the world are not only dealt in, but actually handled; where offices are grimy and the warehouse bursting with riches. During the daylight hours there is no cease to the movement here—not the movement of people, but the movement of goods. It is not the prestissimo movement either that one sees over on the great thoroughfares of travel, but the open, largo movement of cargoes on wheels drawn by ponderous beasts of burden. It is the extent not the rapidity of the business that is bewildering. It is as though all the world had turned merchant and was trading here. And then, when the dusk comes on, a strange loneliness comes down on everything. The roaring trucks go off and their absence alone changes the whole character of the locality. Great iron doors are banged to; specks of light show where the shipping clerks are laying out their plans for next morning's first job; the narrow streets take on unaccustomed airs of quiet and are seen to be even narrower and dirtier than they were thought to be when filled from house to house with moving loads of clean packages; and when the last clerk locks the last door and scurries away to the lighted and lively streets, it is as though the very spirit of loneliness had taken possession of the place.

NOVEL SHOW FOR CHARITY

AMATEUR BALLET GIVEN BY YOUNG WOMEN DECKED AS FLOWERS.

Some of Them Wore Tights and Short Skirts—They Danced, Sang, and Raised Several Thousands of Dollars.

A novel performance was given last Wednesday night in the Lexington Avenue Opera House. Some sixty young, pretty, and shapely girls, fifteen or twenty handsome matrons, and a score or more children attired themselves in attractive costumes, and appeared in a spectacular production which was aptly called a "Congress of Flowers." The girls were all members of the Monté Relief Society, a Hebrew charitable organization, and the object of the performance was to raise money for the extension of the charitable work.

The play or spectacle was written and designed by Mrs. Mollie Teschner, and consisted almost entirely of chorus singing, solo singing, and ballets. It dealt with the complaint of the national flower, the golden rod, that it was neglected and allowed to grow in wild places without care. Of course there was a fairy queen. The golden rod's complaint was made to her, and she finally arranged matters all right by marrying the golden rod to the Monté rose, the flower of the society. There was a minstrel show, too by fifteen pretty girls in knickerbockers, made up to represent sunflowers, and the ballets with half a dozen girls or more in each.

MRS. SOFIA MONTÉ LOEBINGER.

Mrs. Sofia Monté Loebinger, the President of the society, played the part of *Golden Rod*. She wore gold-colored knickerbockers, white stockings and slippers, and a gold-colored coat, with long tails almost down to her heels. A ruffled shirt, a fascinating Nadjy hat with a long tassel and a profusion of golden rod streamers completed her costume. Mrs. Teschner as the *Fairy Queen* wore a conventional costume of white silk, covered with spangles, and carried a wand. Little Baby Wolfe as *Cupid* was made up as *Puck* and cut an interesting figure throughout the play. But it was the ballets that interested the audience. There was a ballet of lilies, a ballet of poppies, and also ballets of violets, fuchsias, daisies, orange blossoms, sunflowers, jasmines, and roses.

THE GOLDEN ROD.

When the curtain went up on a scene in fairyland, fifteen children attired as fairies were busily engaged in weaving a dress for *Golden Rod*, who, it seems, had already been to them with a complaint of her neglected condition. There was a little dancing and then the *Fairy Queen* came in. Next the curtain rose on a pretty scene representing the realms of flora, and here the performance began in earnest. The sight of so many pretty girls in such dazzling costumes excited enthusiastic applause. The *Fairy Queen* was the first to appear in the second scene, and then Mrs. Loebinger walked on to the stage as *Golden Rod* to lodge her complaint. Every one knew Mrs. Loebinger. She has been President of the society since its organization, and she certainly cut a stunning figure in knickerbockers. The audience manifested approval warmly. When the applause subsided she went on and made her little complaint to the *Fairy Queen*. The *Fairy Queen* replied:

"Since modesty has ever been thy want and the national flower you have been voted, love shall in your heart awaken, and a mate, handsome and wise, you shall wed, to elevate your position."

Golden Rod looked pleased at the prospect and then the *Fairy Queen* went on and said:

But first, that you may ever be content,
The Congress of Flowers to you I'll present;
And you shall hear that all, like you,
Have some cause for discontent—'tis true.

THE LILY.

Then she called in the different ballets, each one of which represented a different flower. There was a spokesman for each ballet, and each had some complaint to make to the *Fairy Queen*. The ballets entered dancing, and the applause that greeted each one was deafening. The first ballet was that of the lilies. There were five of them and they all wore white satin dresses reaching to the knees, white silk stockings and slippers. The skirts of the dresses were of novel design and were made to represent the petals of the lily. Each girl wore her hair done up in a knot on the top of her head, and entwined in it was a large lily. It was one of the prettiest of the ballets and was supposed to represent a male flower.

The poppies came next. It is a female flower, and the five girls in the ballet wore red and black tarletan ballet skirts, red tights and slippers, and red satin waists. The ballet skirts were made just limp enough to reach the knee, although the outer skirt was some distance away from the body. Streamers of poppies and tinsel galore completed the costume. Next came the violets. Ballet skirts of light violet tarletan, dark waists, tights and slippers to match, and wreaths of violets in the hair and around the shoulders made up the costumes. The fuchsias, the only other male flower, were attired in skirts to the knees, made up of white satin cut to represent the pretty little bell-shaped flower. They wore deep red waists and stockings and shoes to match. The daisies wore ballet skirts of white tarletan, tights and yellow satin waists. They also wore sprays of artificial flowers in the hair. The orange blossoms wore white ballet skirts and white tights, but had waists of pale green and wore wreaths of orange blossoms around their heads. The jasmines wore pale pink waists with white tarletan skirts and tights.

THE POPPY.

The sunflowers, fifteen in number, were next called on by the *Fairy Queen*, and they made the hit of the evening. The programme announced that they would give a minstrel performance later, and the audience was curious to see them. They came tripping gracefully on the stage in green knickerbockers, long-tailed green coats, with red satin cuffs, white silk stockings, and white silk slippers, each one adorned with a huge sunflower. It was the headdress that made the hit. Each girl wore a green silk skull cap on the back of her head, while her face was framed in with sunflower petals of yellow satin, which encircled the entire face. Their faces were all blackened with burnt cork, and at a distance the heads looked like so many real sunflowers.

The roses also made a hit. There were five of them, two yellow, two Jacks, and one deep pink, the *Monté Rose*. The yellow roses wore white ballet skirts and tights, yellow waists, and wreaths of large yellow roses in their hair. The Jack roses were attired in the same fashion, only their waists were deep red, while the *Monté Rose* was in pink.

THE SUNFLOWER.

The dancing was pretty and showed the result of careful training, while the complaint of each flower was well told in verse. At this point the *Golden Rod* put in an appearance, and seeing the *Monté Rose*, Miss Alfrieda Neuberger, immediately fell in love with her. The *Monté Rose* spurned him, on the ground that although he had been chosen the national flower he was not so regarded by the world. She was the favorite flower, she said, and the *Golden Rod*, heartbroken, was carried away to the elves by the *Fairy Queen*. While she was gone the dancers and singers got together again and carried on high revelry.

This part of the programme was very interesting. It was an opening for the specialties, which consisted of solo dances, recitations, songs, jokes, and ballet dancing. The rendering of the wine song from "Giroflé-Girofla" by the *Monté Rose* was in true Lillian Russell style, and it had to be repeated three times. The Sun Flowers took advantage of the departure of *Golden Rod* and the *Fairy Queen* to give their minstrel performance. They sat in the usual semi-circle, and there was a middle man, two ends and bones, and tamborines galore. Jokes were cracked in true minstrel style. T. S. Dare was *Wild Oscar*, the interlocutor, and Miss Maud Morris was the *chanteuse eccentrique*. The minstrels looked like a long row of sunflowers, and after they had exhausted their supply of jokes and funny stories they sang and danced and took encore after encore until they had to leave the stage from pure exhaustion.

Then *Golden Rod* and the *Fairy Queen* came back and the *Monté Rose* of course fell in love with the former in his new attire, which had been prepared by the elves. A love song by the ballets followed, and then every one marched off the stage singing "He's Going to Marry the Monté Rose," to the tune of "The Flowers that Bloom in the Spring, Tra La." But that was not the end of the performance. The prettiest exhibition of the evening was to come. The programme announced it as the "Grand Apotheosis." When a rear curtain went up it disclosed the entire Congress of Flowers grouped around the *Fairy Queen*, who, high in the air, was holding her wand over *Golden Rod* and the *Monté Rose*, who were clasped in each other's arms. The ballets were grouped around. At the end every one agreed that it had been a most artistic entertainment, and, any way, several thousand dollars was the result.

THE GRIZZLIES OF IDAHO.

A Tacit Agreement with Men in the Early Days Not to Molest Each Other.

"Speaking of grizzly bears," said Judge Henry I. Warren of Albuquerque, "we didn't look on these animals as particularly dangerous in Idaho when I was the United States District Attorney of that Territory. If a man attacked one at close quarters he sometimes got killed, but at a little distance not much more attention was paid to bears than if they had been so many hogs or cattle. Between human beings and the bears there seemed to be at that time a tacit agreement to let one another alone.

"One of my hardest horseback trips led me through a wild region where I often saw bears. At one point the trail crossed an open valley, dotted with scattering big trees and clumps of underbrush, and on the further side wound up a steep mountain side through thick oak and pine woods. Coming down into that valley one day I saw, a little way off on my right, five bears, two very large ones and three smaller ones, constituting possibly a family party. They were running about here and there nosing the ground, turning over stones and knocking to pieces rotten logs, hunting for mice and grubs. They apparently paid no attention to me as I rode past, a hundred and fifty yards away. My horse looked a little wild and fidgetted some at the sight of them, but I kept him in the trail without difficulty.

"At another time a bear gave me considerable of a scare. I had crossed this same valley and was just beginning to ascend the wooded heights beyond it. I had dismounted, and was leading my horse up the steep hillside when a bear broke out of the bushes a little behind me and came for me furiously, showing her teeth and growling. I stood still, expecting to be torn to pieces the next moment, from the determined way in which she came—it was a she-bear—but she stopped just short of seizing me and turned to dash in the same way at my horse, and at that I dropped the bridle and made up the trail as fast as I could go. My horse, instead of turning back to run for life in the clear open ground of the valley, when she charged at him, made a detour up the hill and came back on the trail behind me. The bear, looking mighty ugly with her frothing mouth and bristling hair, kept up her demonstrations, directing them principally at my horse. You know how a horse, when thoroughly frightened, will seek the company and protection of humanity, and so, do all I could to drive him away, my beast all the time kept right behind me, with his nose at my shoulder, trembling with fear, but refusing to leave me, as the bear kept making dashes at us out of the bushes, sometimes from one side and sometimes from the other.

"I didn't know then what I have learned from the habits of the animals since, that the bear was running a bluff on us and did not mean so much to harm us as to scare us away. She undoubtedly had cubs concealed close by in the bushes and resorted to a common trick of the female bear to drive away intruders. Probably if I had stood my ground she would have tackled me, and in that case it would have been all up with me. She followed us a hundred yards or so and then seeming satisfied that she had got us fairly on the run, fell back into the bushes and watched us out of sight."

THE COWBOY'S EDUCATION.

HE MUST LEARN TO RIDE, TO THROW THE LARIAT, AND TO SHOOT.

His Pride in His Pistol—Weapons Inlaid With Gold and Studded With Diamonds—The Victims Numbered by Golden Stars.

FORT SILL, Oklahoma, Dec. 4.—The pride of the cowboy is his pistol. He pays more for it than for forty ponies. He takes better care of it than he does of himself. He cannot approach it in cleanliness, delicacy, and reliability. He knows this, and, on account of such knowledge, his pride in it increases.

Deeds of prowess with the pistol among cowboys and Western freemen reflect more credit on the pistol than on its owner. Hence it is that in many parts of the West the cowboy is noted for his pistols rather than for qualities of his own. In the East the cowboy's favorite firearm is called a revolver. In the West it is known as a pistol or a pop. The cowboy usually carries his pop stuck in his belt just over the watch pocket on the right side of the trousers. The belief is common in the East that he carries it tucked away on his right hip. That is where he carried it in the old days, but things have moved to the front since then, pistols included, and the cowboy now wears his weapon where its butt will rub his hand, as if to remind him that it is ready for work.

A tenderfoot from the East who settles in the West to live the life of a cowboy finds he has much to learn. His first lesson is in riding a cowboy horse in cowboy style. In the East the owner of a fine saddle horse delights in its prancing and high stepping. In the West the cowboy delights to prove his pony a good one by having it buck and snort and plunge whenever and wherever he mounts it. The tenderfoot catches this cowboy spirit by riding a bucking, snorting, plunging pony. He learns to do this only by becoming a limp, unjointed rider without a trace of stiffness or resistance to his pony's movements. As he gradually learns to ride he takes up the study of the lariat or lasso. This requires more patience, if less suffering, than learning to ride. The tenderfoot gets discouraged. He is told that the pony is the cowboy's first means of defence, and that the lariat is the second. Until both are mastered, the tenderfoot cannot hope to learn to use the third and most important—the pistol. With this advice the tenderfoot goes at it again. A stake is driven in the ground, and the tenderfoot throws the noose at it hour after hour. He gets tangled up in coiling the lariat once it is thrown and gets tangled up in throwing it. Finally he gets the knack of holding and casting it properly and manages to drop it over the stake at a distance of ten feet. Then he gradually moves back, increasing the distance until he can cast accurately thirty feet. Once he does this he changes the object from a stake in the ground to a bough on a tree. He finds throwing upward much more difficult than throwing straight or downward. But he perseveres, and at length begins to throw at moving objects. Usually these objects are pigs and dogs, particularly dogs. No man who knows his business will let a green hand practise throwing the lariat on him. There is a great knack in handling the rope, once it is thrown, and the tendency among new hands is to tighten the lariat before it fairly falls. Thus the object lassoed is liable to be strangled, although the beginner has the best intentions.

Practising on hogs is expensive, for the hog is apt to be thrown so hard and so quickly as to break a leg and render it worthless save for meat. Hence it is that dogs are the favorite victims. There are hounds in this country who have helped to develop many a tenderfoot into a cowboy. They become expert subjects and valuable teachers. They run fast or slow, jump or roll, dodge or halt as they think best to avoid the noose. Once they are caught they run rapidly toward the learner, thereby preventing his strangling them. They seem to enjoy it, and manage to keep the thrower busy.

After learning to lasso a moving object on foot, the would-be cowboy tackles the task of lassoing from his pony's back. This requires consummate skill to execute well. The pony must be well under control, the seat must be firm, the arm must be strong, and the eye true. The dog is again called into play. He starts at a hard run. The rider urges forward his pony, calculates his speed and that of the dog, as well as the distance between them, and lets fly his rope. Usually he throws short, miscalculating the distance and failing to allow for the dog's motion. He rectifies this fault, however, and then takes up the last and hardest part of his lesson—that of lassoing a steer. In learning to lasso a steer running full tilt and bring it to a halt the beginner encounters numerous hair-breadth escapes. He must not, under any circumstances, allow a foot of his rope to dangle save from the horn of his saddle. If he does, the quick tightening of the rope may draw taut the loose coil about some part of his body, cutting it like a knife. He must be careful to throw his pony well back to withstand the shock of the stopping of the steer's career. He must be well back in his saddle clear of the bow, and above all he must have his girths sound and secure. All his knowledge of his pony and his lariat are called into active use.

Once a man masters this art, it is marvellous the skill and dexterity he has at his command. The writer has seen a mad steer charge headlong on a cowboy not ten feet away. The pony of the cowboy leaped aside as the steer reached him. The lariat uncoiled like a thin snake and settled over the steer's horns. The pony settled on his haunches. The lariat coiled once more, and a circle caught the steer's right leg as it was raised. The cowboy leaned far back, the lariat tightened and trembled, the steer fell headlong, its right leg drawn tight against its horns.

After the pony and the lariat comes the pistol. The cowboy learns the knack of the pony and lariat first, because without them he is no cowboy. They are the tools of the working side of his life, particularly the lariat. The pistol is the pride of his other moments, when he is the cowboy of leisure sporting in saloons and shooting in gambling houses. It is greater to be a cowboy of leisure than a mere cowboy of labor, and the greater his name the greater his fame. Hence his great pride in his pistols. His pony must of necessity be good. His lariat is like unto others of fine hair, affording no opportunity for competition save in its use. But his pistol allows him to compete untrammelled both in its value and its use.

The cheapest pistols used by cowboys who take pride in them cost $20. There is no limit set on the cost of the pistol. The writer has seen cowboy's weapons which cost $2,000 and $2,800. Of course, this money was not represented by the make of the pistol so much as by the ornaments which decorated it. But the cowboy usually has some local expert put on the decorations. He sends East for the best pistol money can buy. When it reaches him he spends weeks testing it and, as he says, "getting onto its ways." He shoots hundreds of shots from it on foot at still objects at different distances. Then he shoots on foot at moving objects. Next he mounts and fires at still objects, then at moving objects. He fires countless shots, testing the weapon in every way. He fires it upside down, sideways, over his shoulders, behind his back, in short, in every style he can devise. If it satisfies him, he turns it over to be decorated; if not, he throws it away and sends for another.

Many cowboys, particularly rich ranchmen, spend as much on decorating their pistols as an Eastern man does in furnishing his house. They have a pistol inlaid with gold and stud its butt with diamonds or costly relics. Phil Guthrie, a ranchman well known here, has a pistol which cost him $2,400 for decorations alone. On the butt he has a crescent of diamonds, in the centre of which is a stone costing $1,100. The trimmings are of solid gold. The figure of a cowboy mounted on a pony lassoing a steer is worked in gold on the other side of the butt. The lariat is of fine thread gold, and is entirely free from the butt save at the ends. The horns of the steer are made of pearl. Guthrie's pistol is by no means the most expensive one in this country. Fenn Dworak, who has a big ranch on the Henrietta trail, has a pistol so costly and so reliable that its owner is known as the possessor of "Dworak's pop," a title which has made him famous clear into New Mexico.

The average pistol of a cowboy represents an outlay of from $100 to $250. Many of the cowboys, instead of recording deaths by notches on the butt, as was the custom in old times, have a gold star set in the woodwork. Lark Kessler of Anadargo has almost enough stars to represent all the States of the Union on his pistol's butt.

The ability to use the pistol precedes any extravagant outlay on the weapon. The tenderfoot tackles the task of handling a revolver, and tries to get the knack that only persistent practice can reach. Once he gets the knack he keeps at it until, as Kessler says, "a knack gets to be so natural that it becomes instinct." And truly many cowboys are so skilful with the pop that they seem to be good shots from instinct rather than acquirement.

The rifle, especially the Winchester, is popular among cowboys, but it is carried much as an Eastern man carries an overcoat as a protection against exceptionally heavy weather. The pistol is the every-day suit of clothes which must be worn and can stand the wear and tear.

All cowboys, of course, do not have expensive weapons. But Western cowboys are in one way like Eastern doctors. All physicians do not sport handsome coupes and slick grooms. But all well-to-do prosperous physicians are supposed to have them. And there are grades of cowboys just as of physicians.